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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/693,887 | 10/28/2003 | Hiroataka Nishizawa | XA-9415A | 4044 |

7590

03/16/2004

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EXAMINER

FUREMAN, JARED

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 03/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/693,887

Applicant(s)

NISHIZAWA ET AL.

Examiner

Jared J. Fureman

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 29 is/are rejected.
- 7) ☒ Claim(s) 30-35 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/756,867.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/28/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Receipt is acknowledged of the preliminary amendment, filed on 2/18/2004, which has been entered in the file. Claims 29-35 are pending.

Claim Objections

1. Claims 29, and 30-35 are objected to because of the following informalities:

Claim 29, line 1: "IC" should be replaced with --integrated circuit (IC)--, in order to clarify the claim.

Claim 30, line 1: "IC" should be replaced with --integrated circuit (IC)--, in order to clarify the claim.

Claim 33:

Line 2: "the" (second occurrence) should be replaced with --a--, in order to avoid a lack of proper antecedent basis for "the state".

Line 3: "the" should be replaced with --a--, in order to avoid a lack of proper antecedent basis for "the state".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwasaki (US 5,550,709) in view of Sekiguchi (US 5,126,548).

Iwasaki teaches an integrated circuit (IC) card comprising: a card substrate (3); a semiconductor chip (2) mounted on the card substrate; a resin (5) sealing the semiconductor chip; a plurality of connector terminals (1b) formed on the card substrate; and a casing (6) covering a part of the card substrate; and wherein said card substrate has a plurality of terminals which are not covered with said resin and are covered with said casing (as shown in figure 3, there are terminals (not numbered) connected between wire bonds 4 and terminals 1b. These terminals are exposed from resin 5 and are covered by card supporter 6, as shown in figure 5) (see figures 1-5 and column 3 line 34 - column 4 line 20).

Iwasaki fails to specifically teach wherein said IC card has a plurality of modes in which numbers of data terminals used by each mode are different from each other.

Sekiguchi teaches an IC card (10) that has a plurality of modes in which numbers of data terminals used by each mode are different from each other (a mode that only used terminals C_1 - C_8 and a mode that used both terminals C_1 - C_8 and A_1 - A_8) (see figures 4, 7, column 1 line 50 - column 2 line 10, column 2 lines 34-45, column 2 line 59 - column 3 line 47, and column 4 lines 64-68).

In view of Sekiguchi's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the IC card as taught by Iwasaki, the IC card having a plurality of modes in which numbers of data terminals used by each mode are different from each other, in order to provide high-speed data transfer through the additional terminals (see column 4, lines 64-68, of Sekiguchi).

Allowable Subject Matter

4. Claims 30-35 would be allowable over the prior art of record upon the correction of the claim objections noted above.
5. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record, taken alone or in combination, fails to teach or fairly suggest: an integrated circuit card having a first semiconductor chip and a second semiconductor chip mounted on the card substrate; a resin sealing the first semiconductor chip and the second semiconductor chip; and wherein said card substrate has a further plurality of terminals which connect said first semiconductor and said second semiconductor chip, that are not covered with and said resin and that are covered with said casing, in combination with the other claimed limitations as set forth in the claims.

While Iwasaki teaches the card substrate having a plurality of terminals which are not covered with said resin and are covered with said casing (as discussed above), however Iwasaki et al does not teach the IC card including a second semiconductor chip and terminals connecting the first and second semiconductor chip.

Jigour et al teaches and IC card that includes terminals 711-718 which connect a first semiconductor chip (controller 1400) and a second semiconductor chip (1412 and 1414) (see figures 11-14), however, Jigour et al teaches that the terminals are exposed (see figure 7) and not covered with a casing.

Thus, without the benefit of applicant's teachings, there is no motivation for one of ordinary skill in the art at the time of the invention to combine the prior art of record in a manner so as to create the claimed invention.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Iwasaki (US 6,642,611), Masuda et al (US 6,686,663), Masuda et al (US 6,583,331), Nishizawa et al (US 6,573,567) Song et al (US 6,552,423), Gore et al (US 6,492,717), Nishizawa et al (US 6,431,456), Fischer et al (US 5,969,951), Jigour et al (US 5,815,426), Iwasaki (US 5,612,532), and Michalk (DE 199 15 766 A1) all teach IC cards.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jared J. Fureman whose telephone number is (571) 272-2391. The examiner can normally be reached on 7:00 am - 4:30 PM M-T, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2876

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 6, 2004

Jared J. Fureman
JARED J. FUREMAN
PRIMARY EXAMINER